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- (71) Applicant (for all designated States except US): **PURDUE RESEARCH FOUNDATION** [US/US]; 3000 Kent Avenue, West Lafayette, IN 47906 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **WEBSTER, Thomas, J.** [US/US]; 1202 Burberry Drive East, Apt. #169, Lafayette, IN 47905 (US). **MCKENZIE, Janice, L.** [US/US]; 220 Ferry St. #4, Lafayette, IN 47901 (US).
- (74) Agents: **CONTE, James, B.** et al.; Barnes & Thornburg LLP, P.O. Box 2786, Chicago, IL 60690-2786 (US).
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(54) Title: NANOFIBERS AS A NEURAL BIOMATERIAL



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(57) Abstract: Nanomaterials for neural and orthopedic prostheses are disclosed. Composite carbon nanofibers enhance neuronal growth and minimize glial scar tissue formation. Methods and compositions to promote neuronal growth and minimize scar tissue formation during prolonged monitoring and treatment of neural tissue are disclosed. Composite polyurethane carbon nanofiber is a suitable material for neural implant. Composite carbon nanomaterials decrease adhesion of astrocytes and fibroblasts.

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